Blood-Stream Infection (CDC)

From: Jack LeDonne [jackledonne@me.com]
Sent: Tuesday, November 17, 2009 5:00 AM
To: Blood-Stream Infection (CDC)
Subject: Public commentary on the BSI Guidelines
Attachments: The Great Anatomic Misconception.doc; ATT532659.htm; CCM_AXV puncture.004.tiff; ATT532660.htm; CCM_AXV puncture.001 copy.tif; ATT532661.htm

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Line 301. 7. Use a subclavian site, rather than a jugular or a femoral site, in adult patients to minimize infection risk for nontunneled CVC placement [25, 99, 100]. Category IA

Line 307. 10. Use ultrasound guidance to place central venous catheters to reduce the number of cannulation attempts and mechanical complications if this technology is available [106, 107]. Category 1B

Dear CDC,

I am writing this note with all due respect, humility and sincerity. Essentially, I believe, practice and teach Line 307, the use of ultrasound guidance (Us-g) to place central venous catheters (CVCs), daily. The reason for this communication is that I am certain that Line 301 is flawed, for this reason: I do not believe that the subclavian vein (SCV) can be cannulated with Us-g, in adults. It is the axillary vein (AXV) that is always cannulated. My recommendation is to substitute the term “chest site” for the term “subclavian site”.

Personally, I have essentially made a career out of central venous access (CVA) utilizing the thoracic veins, in adults. My experience is clinical and I find it difficult to write and publish. From 1997 until the present, I have cannulated the axillary vein, in the infraclavicular region over 3,000 times (unpublished), video recording 2000 . My

paper, Percutaneous Cephalic Vein Cannulation (in the Delto-pectoral Groove), with Ultrasound Guidance (JACS, May '05) remains the only publication on this technique. I have never cannulated the SCV with US-g. My paper, The Great Anatomic Misconception: The Central venous Catheter is in the AxillaryVein, not the Subclavian Vein, was accepted by two reviewers and rejected by two reviewers from CCM '08, and finally rejected. It has not yet been resubmitted (attached).

I have lectured on this topic at the Association for Vascular Access and the GAVeCeLT, in Rome. Mary Alexander may have been in attendance, at one of the presentations. I have spoken to Drs. O' Grady and Randolph, on the phone, about this issue. I met Dr. Garland, in Dallas, a few weeks ago. Please consider the following:

1. The anatomy of the human venous system has been accurately known for over 300 years.

2. When blood leaves the arm it enters the AXV, flows into the SCV then on into the brachiocephalic and the vena cava.

3. At the lateral border of the 1st rib, the AXV becomes the SCV.

4. It is very difficult or impossible, in most adults, to visualize the SCV with US-g, due to the overlying clavicle. If one does visualize the SCV, generally the US probe is held at a "funny" angle. This angle is not conducive to needle insertion.

5. Please ignore the arrogance in the following statement. If someone, with my experience (3,000 AXVs, 250 cephalic veins) is unable to cannulate the SCV, with US-g, then who is doing this procedure (SCV)?